

ABSTRACT

A dry-etching apparatus includes a sequencer for establishing dry-etching conditions such that when inputting the parameters relating to dry-etching conditions, directly or through a memory device of a computer, to the sequencer and then starting the dry-etching process, the dry-etching is automatically carried out with an etching gas that consists of chlorine, oxygen and hydrogen gases at relative flow rates of from 66 to 46, 17 to 11 and 18 to 41% by volume, respectively, or with an etching gas that consists of chlorine, oxygen and hydrogen chloride gases at relative flow rates of from 58 to 44, 15 to 11 and 28 to 45% by volume, respectively.